



Camera Trapping for Outdoor Fun and Exploration

Don't forget to check out our website, <https://riverotterecology.org/families-students-teachers/> for more on camera trapping including a brief video talking about camera placement. This information will be placed there as well.

Camera Traps: Set up and checks

Camera traps are set up to capture wildlife activity at locations where there are signs of regular wildlife use OR as a survey of what, if any, wildlife is found in an area. Don't forget that no wildlife is data too, and gives you information you didn't have before. No wildlife may bring up interesting questions.

Where should you put your camera? Allow your questions to guide you – what do you notice when you take your class outside? What do you want to find out more about that might be caught on a motion-activated camera? Take some time to discuss this with your class.

New camera site placement

Carefully choose a place to attach your camera. Attach it to a tree, a rock, a shrub; anything sturdy. Avoid branches that sway in the wind. Take your time; this is important!

Begin by seeking places where you find signs of animals or people, like footprints, paw prints, claw prints, etc. Ask questions about what you see; maybe your questions will lead you to your study question.

Cameras should be approximately a meter or more from the area you are trying to capture. Exact distance will be a compromise, because placing the camera further away will widen your field of view but having the camera closer might improve the quality of your videos.

Use straps, lock cable, bungee cords, or any combination thereof, to attach the camera box.

Confirm correct placement and angle of the camera box. You can do this with a laser pointer or take a picture with your cell phone to make sure you're aiming your camera correctly.

Make sure nothing is obstructing your view. You may need to trim back branches or grass in order to get a clear line of sight and to avoid false triggers.

Make sure the batteries have enough power to make it to the next visit. This can be tricky; check the batteries after you've serviced the camera, and before replacing it.

Set the correct date and time. Pay attention to daylight savings changes, as the cameras don't automatically reset.

Set video length appropriately for the site. For a wildlife corridor or area where they pass through, anywhere from 10 to 30 seconds is appropriate. Alter your video length as you get to know your site.

Make sure the camera is secure and sturdy; wildlife sometimes likes to adjust things. Set interval between videos to one second or the smallest possible interval.

Turn the camera on!

Camera Check

Check cams every one to two weeks. Weekly is best.

Switch out the memory card for the new one so you can upload videos to your computer.

Make sure the batteries have enough power to make it to the next visit.

Make sure you turn the camera on!

Camera Trapping FAQ

When should I change batteries? It depends on how often you check the camera. If you're getting a lot of videos each time, change them when they are half-way down. If you're getting few videos, they last much longer. You will get a feel for this as you go. When in doubt, change the batteries.

Never put partially-used batteries into a camera along with full batteries. If one of a group of batteries dies, the camera stops working.

The cameras are water proof, but a silica pack inside the camera back can help keep it dry.

If your problem is loose batteries, which happens on some models, cut a piece of cardboard to fit the back of the camera, to hold batteries in place.

If you're getting a lot of bright flash at the beginning of your videos, reduce the LED setting and change the angle of the camera. Some models are much worse than others with glare.

If you have a settings option to take a photo pre-video, use that. Animals may run through so quickly that the video misses them, and that way we get a better data set.

If you're not able to play the videos from the chip on your computer, download a free media player called VLC and play the videos with the player.
<https://www.videolan.org/vlc/>

Troubleshooting:

First, use a soft cloth to rub the battery contacts in your camera. Just a little bit of corrosion can interrupt the connection. If that doesn't work, replace batteries. That fixes most problems. Next, try replacing the SD card.

If your camera appears to be malfunctioning, you've changed the batteries and the SD card, and it's still not working, talk to Megan during the Institute. The cameras have a 2- year warrantee, and sometimes duds need replacing.

Point the camera facing up or down a trail, rather than straight across.

Place the camera at "animal height," depending on what wildlife you're expecting. Angle the camera slightly down if it's above the height of the animal/s you seek. First try a nice wide area to see what you get.

Be aware that waving grasses, sunrise, sunset and tides can all trigger the camera. Don't get frustrated if you get a lot of false triggers; we all do from time to time. Learn from them and adjust your camera accordingly.

If you're going to be away for a good bit of time and nobody is available to do camera service, put in new batteries and change the settings to photo. The charge and SD card will last much longer that way.

If you make a mistake, don't turn the camera on, or some other goofy misstep, don't worry. We all do it from time to time and the advantage of your study is that the data builds over time. Note mistakes in your camera check form so you can keep track.

Camera Data Log

Keep a log of your findings! It can be extremely detailed or basic, depending upon your grade level and the NGSS standards you're addressing.

At a minimum:

Date, Time, Number of Videos or Photos Collected, Species found, Number of Animals in each video.

Here's an example:

Date	Time	Video Num	Species or Unknown	How many in video?	Notes	Questions
5/27/21	10:02:00	1	Robin	2	Robins and Juncos did not intermingle	
			Junco	4		
5/27/21	10:15	2	People	2	Birds gone	Did people scare them or did they leave for another reason?

Here's an example of one of ROEP's logs, which is directed toward our study question: Number of otters, times and dates seen, adult or juveniles, behavior and observable health issues, plus sample collection for genetic studies.

Date (YYYY-MM-DD)	Time (HH-MM-SS)	Staff Initials	Camera Code	Total Otters Seen	Adults	Juveniles	Otter ID If known	Behavior	Scat or Jelly Collected (Y/N)	Notes
2016-10-16	3:10:43	KJ	MH	2	2			Voc	Y	
2016-10-16	4:45:32	KJ	MH	4	2	2	3-legged otter	Voc	N	3-legs doing fine, looks healthy

Have fun with this, and let your questions be your guide. Megan will be available at the Institute for questions at that time, and further support will be available.